HP BladeSystem p-Class 1U Power Supply

Installation Instructions

for HP ProLiant p-Class BladeSystems

Read instructions completely before beginning installation procedures

Overview

This document provides procedures for installing an HP BladeSystem p-Class 1U Power Supply into the HP BladeSystem p-Class 1U Power Enclosure. Hot-plug power supplies convert AC input power to -48 VDC output power for use by a single server blade enclosure attached to a single HP BladeSystem p-Class Power Enclosure. As long as one power supply in the enclosure is delivering power to the server blade enclosure, you do not have to power down the system before removing or installing a hot-plug power supply.

Kit contents
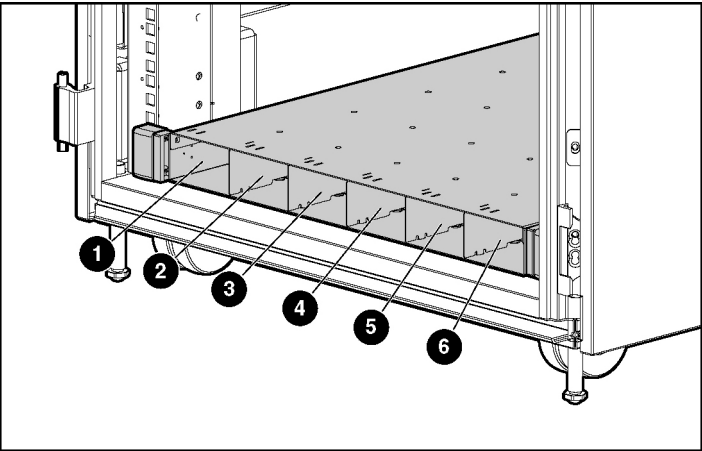
- Hot-plug power supply
- PDU power cord
- This document

Installation requirements

To avoid creating a top-heavy rack configuration, always start in the bottom enclosure in the rack when populating the enclosures in the rack. Connect AC power only to the bays you are populating with power supplies. For example, if you are populating bays 1 and 4, connect the PDU power cords from the PDU to the corresponding AC input power connector on the HP BladeSystem 1U Power Supply Enclosure.

HP recommends installing hot-plug power supplies in a redundant configuration. To implement a redundant configuration, populate one or more of bays 1 through 3 and an equal number of bays 4 through 6 with power supplies. For redundant AC power, bays 1, 2, and 3 must be supplied AC power from a different branch circuit than bays 4, 5, and 6. Each bay must be supplied 200 to 240 VAC, 50 to 60 Hz, single-phase AC power. Ensure that adequate capacity is available on each branch circuit to handle the peak current demands of a fully populated HP BladeSystem 1U Power Supply Enclosure when attached to a fully populated server enclosure.

When deploying the HP BladeSystem 1U Power Enclosure and attached server enclosure into an existing installation, it is necessary to upgrade all management module firmware on all enclosures to the latest version.

Identifying HP BladeSystem p-Class 1U Power Supply Enclosure bays

Item	Description	Configuration
1	Power supply bay 1	Bus A
2	Power supply bay 2	Bus A
3	Power supply bay 3	Bus A
4	Power supply bay 4	Bus B
5	Power supply bay 5	Bus B
6	Power supply bay 6	Bus B

Warnings and cautions

⚠ **WARNING: Do not connect the facility AC power source to the enclosure until directed to do so.**
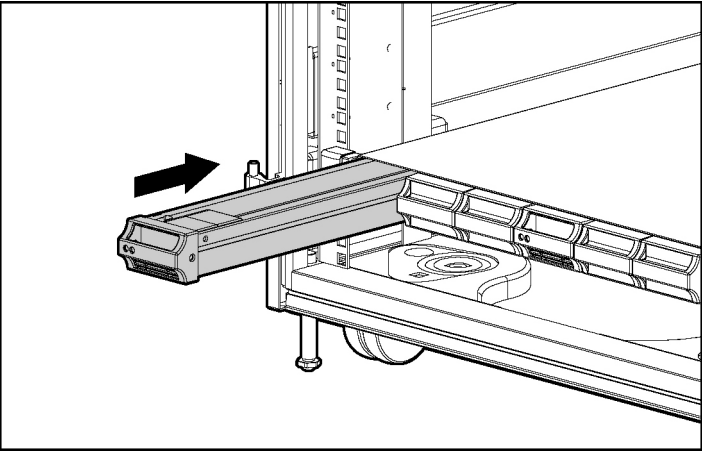
⚠ **CAUTION:** Electrostatic discharge (ESD) can damage electronic components. Be sure that you are properly grounded (earthed) before beginning any installation procedure.

⚠ **CAUTION:** Always install either a hot-plug power supply or a power supply blank into each bay to maintain proper airflow and cooling in the power enclosure. Improper airflow can lead to thermal damage.

Installing a hot-plug power supply
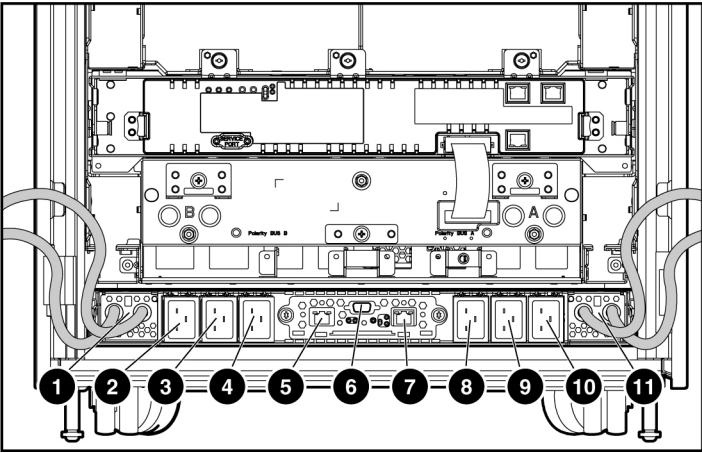
If necessary, remove the power supply blank.

Install the power cord. Refer to the *HP BladeSystem p-Class 1U Power Enclosure Installation Instructions* or to the *HP BladeSystem p-Class Enclosure Installation Guide* for additional information.

> **NOTE:** Order the appropriate AC power cord if you are not using the PDU solution to provide power to the equipment.
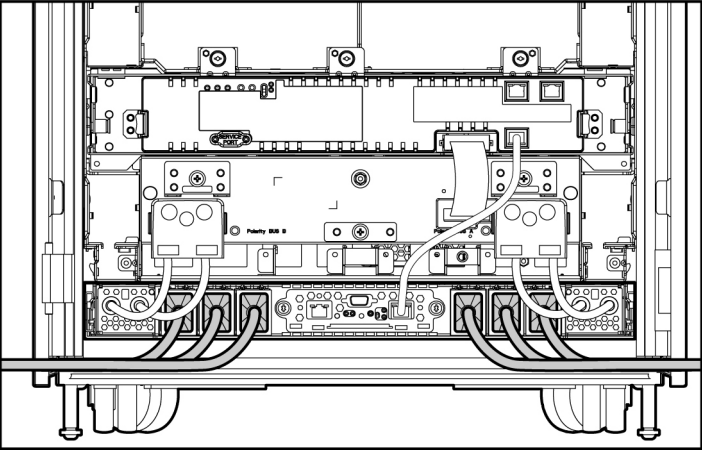
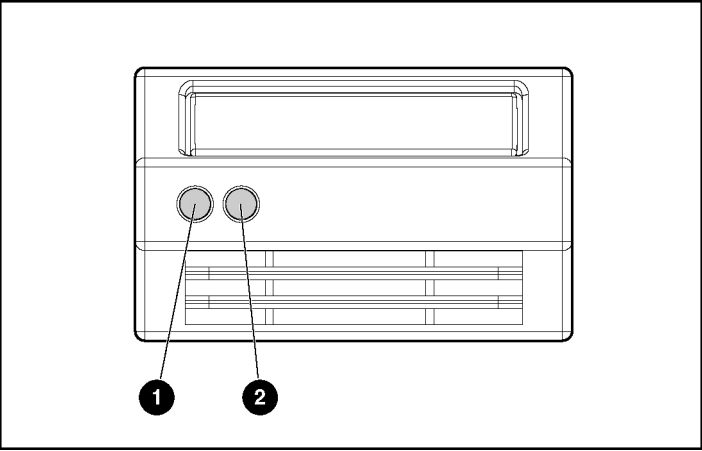## Identifying HP BladeSystem p-Class 1U Power Enclosure components

Item	Description	Cable Type
1	DC output power connector for bus B	DC power cable
2	AC input power connector for bay 6	PDU power cord
3	AC input power connector for bay 5	PDU power cord
4	AC input power connector for bay 4	PDU power cord
5	Power enclosure management link connector (to enclosure below, if necessary)	RJ-45 management link cable
6	Power management module service port	—
7	Power enclosure management link connector (to server enclosure above)	RJ-45 management link cable
8	AC input power connector for bay 3	PDU power cord
9	AC input power connector for bay 2	PDU power cord
10	AC input power connector for bay 1	PDU power cord
11	DC output power connector for bus A	DC power cable

Connecting the enclosure to the facility AC power source

HP BladeSystem p-Class 1U Power Supply LEDs

The power supply has two LEDs to indicate the power supply status. Use the following figure and table to identify LED locations and functions.

NOTE: The Dynamic Power Saver configures the available power supplies to operate at maximum efficiency.

Condition	Power LED (1)	Fault LED (2)
No AC	Off	Off
AC available, power supply in standby mode[1]	Flashing (Green)	Off
Power supply on, delivering power	Green	Off
Power supply fault condition[2]	Off	Amber

[1] This condition will occur when the Dynamic Power Saver is enabled.

[2] To reset the power supply overload warning, remove AC power or hot-unplug and hot-plug the power supply if more than one power supply in the enclosure is delivering power to the server enclosure.

The installation is complete.

Regulatory compliance notices

Regulatory compliance identification numbers

For the purpose of regulatory compliance certifications and identification, this product has been assigned a unique regulatory model number. The regulatory model number can be found on the product nameplate label, along with all required approval markings and information. When requesting compliance information for this product, always refer to this regulatory model number. The regulatory model number is not the marketing name or model number of the product.

European Union regulatory notice

This product complies with the following EU Directives:

- Low Voltage Directive 73/23/EEC
- EMC Directive 89/336/EEC

Compliance with these directives implies conformity to applicable harmonized European standards (European Norms) which are listed on the EU Declaration of Conformity issued by Hewlett-Packard for this product or product family.

This compliance is indicated by the following conformity marking placed on the product:

$\mathsf{C} \mathsf{E}$

This marking is valid for non-Telecom products and EU harmonized Telecom products (e.g. Bluetooth).

$\mathsf{C} \mathsf{E} (\mathsf{xxxx}_*) \textcircled{!}$

This marking is valid for EU non-harmonized Telecom products.

*Notified body number (used only if applicable—refer to the product label)

BSMI notice

警告使用者:

這是甲類的資訊產品，在居住的
環境中使用時，可能會造成射頻
干擾，在這種情況下，使用者會
被要求採取某些適當的對策。

Power cord statement for Japan

製品には、同梱された電源コードをお使い下さい。
同梱された電源コードは、他の製品では使用出来ません。